conducted since that release indicates that the interval for the HAL/CRIS response interval dropped from 13 seconds to fewer than 2 seconds. *See Varner Ga. Aff.* ¶ 170; *Varner La. Aff.* ¶ 184. These data would have met the retail analog for RNS and ROS during the three-month period. *See Varner Ga. Aff.* ¶ 170; *Varner La. Aff.* ¶ 184.

In the *Second Louisiana Order*, the Commission raised a concern over CLECs' access to due dates resulting from delays in returning FOCs to CLECs associated with BellSouth's alleged excessive reliance on manual handling of CLEC orders. *See Second Louisiana Order* ¶ 104. Since then, BellSouth has substantially reduced the percentage of orders, as well as the types of orders, that are subject to manual handling. *See Stacy Aff.* ¶¶ 210, 253, 287. Moreover, as discussed below, the performance data show that BellSouth provides CLECs with FOC and reject and clarification notices in a timely and nondiscriminatory manner. *See LPSC Staff Final Recommendation* at 48. The Commission also raised an issue over BellSouth's automatic due date calculation capability. *See Second Louisiana Order* ¶ 106. BellSouth has since implemented an electronic due date calculator in LENS that allows CLECs to view an installation calendar and obtain an automatically calculated due date. *See Stacy Aff.* ¶ 211; *LPSC Staff Final Recommendation* at 48. Moreover, with the implementation of Release 6.0, LENS has the same due-date functionality as TAG. *See id.*

Integration. In accordance with the Commission's requirements, BellSouth provides CLECs with all the information necessary for integrating its pre-ordering and ordering interfaces. *Texas Order* ¶ 152; *Stacy Aff.* ¶ 36; *LPSC Staff Final Recommendation* at 46. A BOC has "enabled 'successful integration' if competing carriers may, or have been able to, automatically populate information supplied by the BOC's pre-ordering systems onto an order form . . . that will not be rejected by the BOC's OSS systems." *Id.*

Although the Commission previously expressed concern that the access BellSouth provided CLECs to the pre-ordering function was not integrated with their access to ordering functions, *see Second Louisiana Order* ¶ 96, today a CLEC may integrate ordering and pre-ordering functions by integrating the TAG pre-ordering interface with the EDI ordering interface or by integrating TAG pre-ordering with TAG ordering. *See Stacy Aff.* ¶¶ 24, 36-38, 67, 192. Many CLECs have successfully integrated the TAG pre-ordering interface with the EDI and TAG ordering interfaces based on the specifications provided by BellSouth. Indeed, BellSouth estimates that 14 CLECs have integrated the TAG pre-ordering interface with the EDI interface. *See id.* ¶¶ 37, 192. It also appears that 30 CLECs have integrated TAG pre-ordering with TAG ordering. *See id.* ¶¶ 37, 192. Moreover, four CLECs have purchased a TAG pre-ordering/EDI ordering interface built by a third-party vendor. *See id.* ¶ 38.

During the third-party test, KPMG also performed integration testing "to evaluate the degree to which a CLEC could develop automated integrated transactions and to highlight any inconsistencies in field name(s) and format between pre-order and order forms." *See* MTP Final Report at V-13. All evaluation criteria associated with the pre-order/order integration test were satisfied. *See id.*; *Stacy Aff.* ¶ 68.

ii. Ordering and Provisioning Functions

Ordering includes those processes whereby a CLEC requests facilities or services from BellSouth and then receives information, such as a confirmation notice, indicating that the order has been accepted. *See* 47 C.F.R. § 51.5. BellSouth meets all the ordering requirements of this checklist item. First, BellSouth offers EDI, which is an industry-standard electronic ordering

interface.[62] *See Stacy Aff.* ¶¶ 34, 252. EDI, which has been available since December 1996, follows the protocol that was established for ordering and the OBF guidelines for LSRs. *See id.* TAG ordering has been available since November 1998. *See id.* ¶ 33. Finally, BellSouth offers ordering functionality through the GUI LENS. Because LENS uses TAG's architecture and gateway, LENS has TAG's ordering functionality for resale services, designed and non-designed unbundled analog loops, digital unbundled loops, and loop and port combinations. *See id.* ¶¶ 44, 194.

Actual commercial usage of BellSouth's ordering OSS has been extensive. In July 2001, 35 OCNs[63] were using EDI; 60 were using TAG; and 337 were using LENS to submit LSRs. *See Stacy Aff.* ¶¶ 33, 34, 44, 252. Between January and July 2001, CLECs have used BellSouth's electronic interfaces to submit over 512,000 LSRs in Georgia and over 239,000 LSRs in Louisiana. *See id.* ¶ 253. And region-wide, CLECs submitted over 3.14 million LSRs – which are more than what was ordered in all of 2000. *See id.* The use of BellSouth's electronic ordering interface continues steadily to increase. In July 2001, CLECs submitted more than 90% of their LSRs electronically.[64] *See Stacy Aff.* ¶¶ 253, 294. Even at these large and increasing volumes, the performance of BellSouth's ordering systems has been excellent. Between May

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[62] BellSouth is currently in the process of working with CLECs through the change control process of adding an EDI pre-ordering interface. *See Stacy Aff.* ¶¶ 35, 48.

[63] Here the term "Operating Carrier Number ('OCN')" is used instead of "CLEC." The OCN is an alphanumeric code assigned by the National Exchange Carrier Association. Some CLECs, particularly those operating in more than one state, have more than one OCN. *See Stacy Aff.* ¶ 33 n.5.

[64] This figure belies CLEC complaints in state 271 proceedings that too many LSRs fall out by design for manual handling. *See Stacy Aff.* ¶ 294. While BellSouth is committed to providing flow through for as many types of CLEC service requests as is practical, this Commission has recognized that flow through on all service requests is neither practical nor possible. *See New York Order* ¶ 160 n.488; *Texas Order* ¶ 180.

and July 2001, BellSouth's EDI and TAG interfaces were available more than 99.5% of the time they were scheduled to be available. *See Varner Ga. Aff.* ¶ 168; *Varner La. Aff.* ¶ 182 (D.1.1.1, D.1.1.7).[65] This result was confirmed by KPMG. *See* KPMG Consulting, *BellSouth Telecommunications, Inc. OSS Evaluation – Georgia, Supplemental Test Plan, Final Report*, PO&P-11-1-1, at IV-A-7 (Mar. 20, 2001) ("STP Final Report") (App. F – Ga., Tab 76); *Stacy Aff.* ¶ 337.

In granting Southwestern Bell's application for long-distance authority in Texas, the Commission concluded that Southwestern Bell provided nondiscriminatory access to ordering functions by showing that: (1) it is able to return timely order confirmation and rejection notices; (2) its systems flow through a high percentage of CLEC orders without manual handling, at a rate that is comparable overall to the flow through rate for its retail services; (3) the mechanized orders that do not flow through are handled in a reasonably prompt and accurate manner; (4) the mechanized and manual components of its ordering systems are scalable to accommodate increasing demand; (5) it provides jeopardy notices in a nondiscriminatory manner; and (6) it provides timely order confirmation notices. *Texas Order* ¶ 170. BellSouth makes a similar showing here.

Firm Order Confirmations. BellSouth's overall performance in returning timely FOCs has been excellent. *See Varner Ga. Aff.* ¶ 119; *Varner La. Aff.* ¶ 134. For mechanized orders,

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[65] In the *Second Louisiana Order*, the Commission indicated that it would require evidence demonstrating BellSouth's ability to process orders for partial migrations, or "split accounts," in such a way as to provide an efficient competitor a meaningful opportunity to compete. *Second Louisiana Order* ¶¶ 142, 144. Today, CLECs can order both initial and subsequent partial migrations electronically. *See Stacy Aff.* ¶¶ 258-260. CLECs have been able to send LSRs for resale or UNE initial partial migrations since BellSouth implemented EDI in December 1996. *See id.* ¶ 258. In March 1999, BellSouth enhanced the capabilities of EDI,

BellSouth provides CLECs with FOCs in a timely manner based on the benchmark of 95% within three hours. For example, with respect to loop and port combination orders, BellSouth met the benchmark in Louisiana in May through July 2001. *See Varner Affs.* Exh. PM 14-16 (B.1.9.3). In Georgia, BellSouth met the benchmark for loop and port combinations in both May and July. *See Varner Affs.* Exhs. PM-2, PM-4 (B.1.9.3). In June, BellSouth returned timely FOCs for 94.5% of orders – missing the benchmark by only 0.5%. *See Varner Affs.* Exh. PM-3 (B.1.9.3). Overall, in May, June, and July 2001, BellSouth's performance has been solid in both Georgia and Louisiana, returning FOCs for 95% and 98%, respectively, of mechanized LSRs submitted by CLECs within the three-hour benchmark.[66] *See Varner Ga. Aff.* ¶ 120; *Varner La. Aff.* ¶ 135.

BellSouth's performance in returning timely FOCs for partially mechanized orders during May through July 2001 has also been strong. For example, for those measures with significant CLEC activity, including loop and port combination and xDSL orders, BellSouth exceeded the benchmark in both Georgia and Louisiana in each of those three months, returning FOCs for more than 85% of orders within 18 hours. *See Varner Ga. Aff.* ¶ 122; *Varner La. Aff.* ¶ 137 (B.1.11.3, B.1.11.5). Overall, BellSouth in Georgia returned a FOC for 97% of partially

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TAG and LENS to assist CLECs with electronic ordering of subsequent partial migrations. *See id.* ¶¶ 259-260. The fields BellSouth added are industry standard enhancements. *See id.* ¶ 259.

[66] BellSouth is also conducting a detailed root cause analysis of the process for electronic FOCs for those LSRs for which BellSouth did not meet the benchmark. *See Varner Ga. Aff.* ¶ 121; *See Varner La. Aff.* ¶ 136. An action plan will then be developed based on the result of that analysis. BellSouth's initial review indicates that many of the LSRs that did not meet the benchmark were submitted between 11:00 p.m. and 4:30 a.m. when the down stream systems are unavailable. *See Varner Ga. Aff.* ¶ 121; *See Varner La. Aff.* ¶ 136. Specifically, one of the downstream systems, SOCS, must be operational in order to return an FOC, and when this system is down, FOCs cannot be returned because the system is unable to assign a due date. *See Varner Ga. Aff.* ¶ 121; *See Varner La. Aff.* ¶ 136. Their inclusion inappropriately understates

mechanized LSRs submitted by CLECs within the 18-hour benchmark between May and July 2001, and, in Louisiana, the overall performance was 93% between May and July. *See Varner Ga. Aff.* ¶ 122; *Varner La. Aff.* ¶ 137 (B.1.11).

Finally, for manually submitted orders, BellSouth exceeded the relevant benchmark – returning a FOC for more than 85% of orders within 36 hours – for every sub-metric that had CLEC activity in each of the three months. *See Varner Affs.* Exh. PM-2 to PM-4; PM-14 to PM-16 (B.1.13.1 – B.1.13.17). Overall, BellSouth returned a FOC within 36 hours for 99% and 98% of all manual LSRs submitted by CLECs in both Georgia and Louisiana, respectively, from May through July 2001 – far exceeding the 85% benchmark used by the Georgia PSC and Louisiana PSC. *See Varner Ga. Aff.* ¶ 123; *Varner La. Aff.* ¶ 138 (B.1.13).

Reject Notices. BellSouth also demonstrated strong performance in returning timely reject notices to CLECs, with 33,126 of 36,732 rejected LSRs (90%) in Georgia and 3,531 of 3,730 rejected LSRs (95%) in Louisiana returned within the specified benchmarks during the months of May, June, and July 2001. *See Varner Ga. Aff.* ¶ 112; *Varner La. Aff.* ¶ 127 (B.1.4 – B.1.8).

With respect to partially mechanized orders, BellSouth met the benchmark in both Georgia and Louisiana for almost every sub-metric with significant CLEC activity. *See Varner Affs.* Exhs. PM-2 to PM-4; PM-14 to PM-16 (B.1.6.1 – B.1.6.1.17). For example, between May and July 2001, BellSouth met the benchmark for loop and port combinations in Georgia and Louisiana in each month, providing at least 85% of reject notices within 18 hours. *See Varner Affs.* Exhs. PM-2 to PM-4; PM-14 to PM-16 (B.1.6.3). Overall, in Georgia and Louisiana,

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BellSouth's performance. These LSRs will be excluded from the measurement beginning with September data, consistent with the SQM. *See Varner Ga. Aff.* ¶ 121; *See Varner La. Aff.* ¶ 136.

BellSouth provides timely reject notices for over 97% and over 96%, respectively, of all orders returned to CLECs between May and July 2001. *See Varner Ga. Aff.* ¶ 117; *Varner La. Aff.* ¶ 132 (B.1.6).

For manually submitted orders, BellSouth's performance was also excellent. In fact, between May and July 2001 in both Georgia and Louisiana, BellSouth exceeded the relevant benchmark – providing more than 85% of rejects within 24 hours – for almost every sub-metric that had CLEC activity. *See Varner Affs.* Exhs. PM-2 to PM-4; PM-14 to PM-16 (B.1.8.1 – B.1.8.17). And overall in Georgia and Louisiana, BellSouth returned timely reject notices for 97% and 95%, respectively, of all manual orders returned to CLECs between May and July 2001. *See Varner Ga. Aff.* ¶ 118; *Varner La. Aff.* ¶ 133 (B.1.8).

BellSouth's performance in returning reject notices for fully mechanized orders has also been solid, and further improvement can be expected. The benchmark in both Georgia and Louisiana for orders submitted electronically is the return of a reject notice within one hour for 97% of orders. *See Varner Ga. Aff.* ¶ 113; *Varner La. Aff.* ¶ 128 (B.1.4). Although in Georgia, between May and July 2001, BellSouth missed that benchmark, the overall average interval was 66 minutes. *See Varner Ga. Aff.* ¶ 113. In Louisiana, BellSouth met the one-hour benchmark for 90.8% of all mechanized LSRs returned to the CLECs, with an overall average response interval well within one hour. *See Varner La. Aff.* ¶ 128.

BellSouth has determined that a large number of orders that did not meet the one-hour benchmark were issued between 11:00 p.m. and 4:30 a.m., when the back-end legacy systems are out of service. *See Varner Ga. Aff.* ¶ 114; *Varner La. Aff.* ¶ 129. A study in Georgia found that 41% of LSRs that did not meet the benchmark were issued during that period. *See id.* LSRs

submitted during these hours should be excluded from the measurement. *See Varner Ga. Aff.* ¶ 114; *Varner La. Aff.* ¶ 129.[67]

BellSouth has determined that FOC & Reject Response Completeness, a new measure introduced with the March performance data, has deficiencies in its calculation. *See Varner Ga. Aff.* ¶ 42; *Varner La. Aff.* ¶ 57. Changes to this metric were made in August and September data. *See Varner Ga. Aff.* ¶ 42; *Varner La. Aff.* ¶ 57. Importantly, however, it is clear that BellSouth's performance in this area affords CLECs a meaningful opportunity to compete. In investigating this issue, BellSouth has not found any cases where orders have been lost. *See Varner Ga. Aff.* ¶ 43; *Varner La. Aff.* ¶ 58. Moreover, in the Georgia third-party test, KPMG tested this criteria and did not identify any cases where orders were lost. *See Varner Ga. Aff.* ¶ 43; *Varner La. Aff.* ¶ 58.[68]

Flow Through. BellSouth's performance data also demonstrate that BellSouth provides CLECs with parity of service with respect to order flow through. *Second Louisiana Order* ¶ 116. A competing carrier's LSRs "flow through" if they are transmitted electronically through the gateway and accepted into BellSouth's back office ordering systems without manual intervention. *Id.* ¶ 107.

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[67] With respect to percentage of service requests rejected, results for individual CLECs vary widely. *See Varner Ga. Aff.* ¶ 110; *Varner La. Aff.* ¶ 125. For example, in Georgia, of the CLECs submitting LSRs in May, June, and July 2001, 15 of the 20 CLECs that submitted the largest volume of fully mechanized LSRs had reject rates ranging from 3% to 17%. *See Varner Ga. Aff.* ¶ 110. And in Louisiana, seven of the ten CLECs that submitted the largest volume of LSRs had reject rates ranging from 3% to 12%. *See Varner La. Aff.* ¶ 125. Finally, in order to lower reject rates for individual CLECs, BellSouth has developed an action plan template. So far, seven CLECs have agreed to use this template, and initial results indicate a 5% overall reduction in clarification and rejected requests. *See Varner Ga. Aff.* ¶ 111; *Varner La. Aff.* ¶ 126.

[68] Even AT&T, the only CLEC to raise an issue about this measure, does not allege that its orders are being lost. *See Varner Ga. Aff.* ¶ 43; *Varner La. Aff.* ¶ 58.

BellSouth's flow through performance has improved substantially since the date of the *Second Louisiana Order*. Indeed, KPMG's third-party test of BellSouth's flow through and overall functionality and scalability of BellSouth's ordering interfaces determined that BellSouth satisfied all of the applicable test criteria.

Region-wide, in May and June 2001, BellSouth had approximately 75% and 70.4% UNE order flow through. *See* App. L – Ga., Tab 6 (BellSouth Supplemental Filing). In July 2001, this rate improved to 78.5%. BellSouth expects this rate to increase further as its experience handling UNE orders increases. *See Stacy Aff.* ¶ 310. With respect to residential resale orders, in May, June, and July 2001, BellSouth's flow through rates were 90.2%, 87.4%, and 82.8%, respectively, which are close to the 95% benchmark. *See* App. L – Ga., Tab 6 (BellSouth Supplemental Filing). While the business flow through rate was below the 90% benchmark between May and July 2001, this is not surprising. *See Stacy Aff.* ¶¶ 317-325. Business LSRs (which comprise only 5% of the total volume of electronically submitted LSRs) are more complex than the typical LSRs, meaning there is a greater probability for error. *See id.*

These flow through results are comparable to those that Verizon exhibited in their successful 271 application in Massachusetts. *See Stacy Aff.* ¶ 299. In fact, BellSouth's resale flow through results exceed Verizon's levels, and BellSouth's flow through for UNEs are comparable to Verizon's levels. *See id.*

Moreover, aggregate flow through measures by themselves understate the actual flow through capabilities of BellSouth's systems because they "are dependent, in part, on the performance of competing carriers to achieve high rates." *New York Order* ¶ 166. For example, during the month of May 2001, 141 CLECs had 100 or more residential resale orders, and the base calculation flow through rates for those CLECs ranged from just under 20% to over 98%.

See Stacy Aff. ¶ 325. And out of those 141 CLECs, 31 were able to meet or exceed the flow through benchmark of 95%. *See id.* With respect to UNE orders, again looking at CLECs with more than 100 orders that month, base calculation flow through rates ranged from 0% to over 96%. *See id.* Finally, with respect to business orders, base calculation flow through rates ranged from a low of 28% to a high of 80%. *See id.*

In any event, as the Commission has repeatedly recognized, a relatively low flow through rate for certain orders is not, in and of itself, an indication that CLECs are being denied access to BellSouth's ordering systems. *See, e.g., Massachusetts Order* ¶ 77. Rather, "a BOC's ability to return timely order confirmation notices, accurately process manually handled orders, and scale its systems is more relevant and probative . . . than simple flow through analysis." *Texas Order* ¶ 181. As discussed above, BellSouth is providing FOCs and rejects in a timely manner, particularly in the partially mechanized and manual categories. The fact that orders, when they fall out, are handled in a timely fashion is compelling evidence of nondiscriminatory performance. *See id.*

Moreover, as described in the affidavit of William Stacy, since 1998, BellSouth has taken substantial steps to increase the percentage of LSRs that are submitted electronically and to increase the types of orders that now flow through. *See Stacy Aff.* ¶¶ 293, 320-325. For example, BellSouth has formed a joint BellSouth/CLEC Flow through Improvement Task Force to identify potential enhancements to electronic order flow through, document those enhancements, and develop an implementation schedule. *See Varner Ga. Aff.* ¶¶ 126-129; *Varner La. Aff.* ¶¶ 141-144; *Stacy Aff.* ¶¶ 293, 320-325. Thus far, the task force has met in March, April, June, and July 2001, and has identified and prioritized twenty-one flow through

improvement items, all of which are targeted for implementation with Release 10.3 on January 5, 2002. *See Stacy Aff.* ¶¶ 320, 322.

Scalability. The scalability of BellSouth's OSS has been validated by real-world experience. For example, between August 2000 and July 2001, ordering over BellSouth's electronic interfaces increased from an average of 291,743 LSRs per month to over 357,000 per month. *See Stacy Aff.* ¶ 253. BellSouth was able to scale its systems to meet this demand, however, with no measurable reduction in performance; indeed, in many cases, performance has improved. KPMG also tested the ability of BellSouth's OSS to handle increased volumes in the Reengineered Services, Installation, and Maintenance Management System ("RSIMMS"), which emulates BellSouth's production environment in interoperability and flow through testing in support of the pre-ordering and ordering functionality on BellSouth's OSS. *See Stacy Aff.* ¶¶ 584-594. KPMG evaluated BellSouth's ability to accurately and quickly process pre-orders using TAG, and orders using EDI and TAG under "peak," year-end 2001 projected transaction load conditions.[69] *See Stacy Aff.* ¶ 584; MTP Final Report PRE-5 and O&P-4. KPMG found all 13 pre-ordering, and 9 out of 10 ordering, evaluation criteria to be satisfied.[70] Finally BellSouth has performed routine, ongoing, internal normal, peak, and stress volume tests that have shown that BellSouth's production environment has sufficient capacity. *Stacy Aff.* ¶ 594. Clearly, BellSouth's OSS provide CLECs with sufficient capacity to process current and projected volumes.

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[69] KPMG defined "peak" volume as 150% of transactions during the busiest consecutive eight hours of the normal volume tests. *See* MTP Final Report, at IV-E-1, V-D-6.

[70] KPMG found an exception with respect to BellSouth's timeliness in returning functional acknowledgements from the EDI interface. *See* MTP Final Report O&P 4-3-1; *Stacy Aff.* ¶ 464. As explained above, however, BellSouth upgraded the EDI infrastructure to shorten

Jeopardy and Service Order Completion Notifications. BellSouth consistently provides CLECs with jeopardy notifications on a nondiscriminatory basis. *See New York Order* ¶ 185 (BOC must allow CLECs access to order status and jeopardy information). For example, in both Georgia and Louisiana, BellSouth's performance exceeded the retail analog for loop and port combination orders in both May and June 2001. *See Varner Ga. Aff.* ¶ 135; *Varner La. Aff.* ¶ 150 (B.2.5.3). Although BellSouth did not meet the parity benchmark in July 2001 in Georgia and Louisiana, the difference in Louisiana was minimal – the measure for CLECs was 0.89%, while BellSouth's retail analog was 0.41%. *See Varner La. Aff.* ¶ 150. Moreover, during this period, BellSouth completed over 99% of all scheduled orders on time. *See Varner La. Aff.* ¶ 150. Because so few jeopardies resulted in missed installation appointments, the jeopardy notice interval had little impact on CLECs' opportunity to compete. *See id.* In Georgia, while 7.1% of CLEC loop and port combination orders were placed in jeopardy compared to 0.9% of BellSouth's orders, BellSouth resolved the majority of these jeopardies by the scheduled completion date, as evidenced by the fact that six out of the seven loop and port combination installation appointment sub-metrics in July were at parity. *See Varner Ga. Aff.* ¶ 135. KPMG found that BellSouth satisfied all test criteria for EDI and TAG electronic jeopardy notifications. *See* MTP Final Report, O&P 1-3-5, at V-A-17; *id.* O&P 1-4-5, at V-A-25; *id.* O&P 2-3-5, at V-B-17; *id.* O&P 2-4-5, at V-B-24; *Stacy Aff.* ¶ 368.

With respect to OCIs, BellSouth has consistently performed well in both Georgia and Louisiana in provisioning UNE loop and port combinations. *See Varner Ga. Aff.* ¶ 131; *Varner La. Aff.* ¶ 146 (B.2.1.3). In Louisiana, BellSouth met the benchmark in all but one of the sub-

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its response time capability, and data collected after this upgrade shows that this problem has been successfully addressed. *See Stacy Aff.* ¶¶ 467-469.

metrics in May through July 2001, and the OCI for orders requiring a dispatch over these three months was only 2.93 days compared with 4.07 days for the retail analog. *See Varner La. Aff.* ¶ 146. BellSouth also met the retail analogs in May, June, and July 2001 for non-dispatch loop and port combinations in Louisiana. *See Varner La. Aff.* ¶ 147.

In Georgia, BellSouth met the benchmark in every sub-metric for provisioning UNE loop and port combinations that require a dispatch. The OCI for these orders was 4.95 days, compared with 5.86 days for the retail analog. *See Varner Ga. Aff.* ¶ 131. For loop and port combinations that did not require a dispatch, BellSouth met the benchmark for one of the past three months. *See id.* ¶ 132. BellSouth conducted a root cause analysis for these orders, which revealed a problem with BellSouth's calculation of due dates. *See id.* In late June, BellSouth implemented a temporary fix for this issue until the due date calculator function could be updated in late September. *See id.* In any event, CLECs were not denied a meaningful opportunity to compete. During the period from May through July 2001, there were over 36,000 non-dispatch orders completed with a CLEC average completion interval of 1.26 days compared with 0.96 days for the retail analog – a difference of approximately one fourth of a day. *See id.*

Provisioning. There are no separate provisioning interfaces because the provisioning process is internal to BellSouth once the order has been submitted. Indeed, for most orders from CLECs, the provisioning systems and processes are the same as those BellSouth uses for its own retail orders.[71]

As explained above, BellSouth provides CLECs with jeopardy notices, order completion, and other order status information. Moreover since November 1999, BellSouth has offered

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[71] BellSouth also addresses the performance data related to specific unbundled network elements in the specific checklist item to which the data apply.

CLECs access to CSOTS, a region-wide web-based electronic interface that allows CLECs to view service orders on-line, track service orders, and determine the status of their service orders. *See Stacy Aff.* ¶¶ 47, 373-378. Three hundred-thirty (330) CLECs are using CSOTS region-wide. *See id.* ¶ 47. KPMG tested the accuracy of response and clarity of information for CSOTS for orders placed through both EDI and TAG and found these test criteria satisfied. *See* MTP Final Report, O&P 1-4-7, at V-A-26 to -27; *id.* O&P 2-4-7, at V-B-26; *Stacy Aff.* ¶ 379.

In assessing whether a BOC provisions CLEC orders for resale and UNE-P services in substantially the same time and manner as it provisions orders for its own retail customers, the Commission examines a BOC's provisioning processes, as well as its performance with respect to provisioning timeliness and quality. *See Connecticut Order*, App. D ¶ 38. For provisioning timeliness, the Commission will look to missed installations and average installation intervals. *See Kansas/Oklahoma Order* ¶ 154 n.433. For provisioning quality, the Commission looks to service problems at the provisioning stage. *See id.* BellSouth's performance in each of these areas is solid.

As discussed above with respect to jeopardy notices, BellSouth exhibits strong performance with respect to percent missed installation appointments. In Georgia, between May and July 2001, BellSouth met or exceeded the retail analog for 14 of the 15 sub-metrics with CLEC activity for loop and port combinations orders. *See Varner Ga. Aff.* ¶ 136 (B.2.18.3). And for the non-dispatch sub-metric in July that did not meet the retail analog, both the CLEC and BellSouth had greater than 99% of all their installations completed as scheduled. *See id.* In Louisiana, BellSouth met or exceeded the retail analog for 13 of the 15 sub-metrics with CLEC activity for loop and port combinations orders. *See Varner La. Aff.* ¶ 151. Again, for the two sub-metrics in July that did not meet the retail analog, both the CLEC and BellSouth had greater

than 99.8% of all their installations completed as scheduled. *See id.* And, as noted above in the OCI discussion, BellSouth's performance in provisioning loop and port combinations was solid in both Georgia and Louisiana for May, June, and July 2001. Finally, BellSouth continues to provide high-quality installations for both CLECs and its retail services. In both Georgia and Louisiana, between May and July 2001, BellSouth met or exceeded the retail analog for percent provisioning troubles within 30 days in almost every sub-metric that had significant CLEC activity, including loop and port combinations and xDSL. *See Varner Ga. Aff.* ¶ 138; *Varner La. Aff.* ¶ 152 (B.2.19.3).

Although BellSouth's performance as to service order accuracy, viewed in isolation, is not as strong as BellSouth's performance in other areas, BellSouth's performance has not denied CLECs a meaningful opportunity to compete. The service order accuracy measure reflects any service order error, even those that do not directly affect customer service. Rather, service order errors that do directly affect customer service are ultimately reflected in the Percent Provisioning Troubles within 30 Days (because the CLEC customer is not receiving the service it thinks it should be getting) and invoice accuracy (because the CLEC is being billed for the wrong service). *See Varner Ga. Aff.* ¶ 153; *Varner La. Aff.* ¶ 167. BellSouth's performance on those measures is excellent. As discussed above, in both Georgia and Louisiana, between May and July 2001, BellSouth met or exceeded the retail analog for percent provisioning troubles within 30 days in almost every sub-metric that had significant CLEC activity. *See Varner Affs.* Exhs. PM-2 to PM-4; PM-14 to PM-16 (B.2.19). And BellSouth met the parity benchmark for invoice accuracy in both Georgia and Louisiana for May, June, and July 2001. *See id.* (B.4.1).

Moreover, BellSouth is committed to meeting the needs of CLECs by making sure the orders are written as requested. *See Varner Ga. Aff.* ¶ 145; *Varner La. Aff.* ¶ 159. As explained

in the affidavits of Alphonso Varner, BellSouth has taken significant steps in improving its performance in service order accuracy. *See Varner Ga. Aff.* ¶¶ 145-153; *Varner La. Aff.* ¶¶ 159-167. For example, operations reviews were conducted on the Atlanta and Birmingham LCSCs in August 2001. *See Varner Ga. Aff.* ¶ 146; *Varner La. Aff.* ¶ 160. BellSouth reviewed and analyzed the data with the LCSC Lead Teams and developed and deployed an action plan for increased service order accuracy in early September. BellSouth has also conducted appropriate training for the service representatives and implemented the action plan in Birmingham on September 17, 2001. That plan has been extremely well received and the perception is that the energy and focus on service order accuracy is already producing excellent results. *See Varner Ga. Aff.* ¶ 146; *Varner La. Aff.* ¶ 160. As a result of these and other steps, improvements should be seen in the coming months. *See Varner Ga. Aff.* ¶ 151; *Varner La. Aff.* ¶ 165. Moreover, negotiations are underway to revise the Service Representative Performance Evaluation Plan to focus on both quality and quantity of service orders. *See Varner Ga. Aff.* ¶ 151; *Varner La. Aff.* ¶ 165.

iii. Maintenance and Repair Functions

To determine whether a BOC offers CLECs nondiscriminatory access to maintenance and repair functions, the Commission reviews performance data reflecting the timeliness of the BOC's interfaces used for maintenance and repair functions, the timeliness of its repair work, and the quality of the repair work. *See Massachusetts Order* ¶ 96.

BellSouth offers CLECs electronic interfaces for trouble reporting that provide CLECs with access to maintenance and repair functions in substantially the same time and manner as BellSouth offers access for its retail operations. *See Kansas/Oklahoma Order* ¶¶ 161-162; *Stacy Aff.* ¶¶ 385-386. BellSouth offers such access through its Trouble Analysis Facilitation Interface ("TAFI") and Electronic Communications Trouble Administration ("ECTA"). *See Stacy Aff.*

¶¶ 49-51, 389. Since it was first introduced in March 1997, TAFI has been the same maintenance and repair system that BellSouth's own retail representatives use to handle a trouble report for any basic exchange service (*i.e.*, telephone number-based or non-designed services). *See id.* ¶¶ 49, 393-397. Through TAFI and ECTA Local, BellSouth provides CLECs electronic access to BellSouth's maintenance and repair OSS that enable a CLEC to access all the same functions that are available to BellSouth's retail representatives. *See* id. ¶ 386. *See also Kansas/Oklahoma Order* ¶ 161.

In the *Second Louisiana Order*, the Commission raised a concern that TAFI did not provide CLECs with nondiscriminatory access to maintenance and repair functions. *See id.* ¶¶ 149-152. But TAFI is not a machine-to-machine or integratable interface for BellSouth.[72] *See Stacy Aff.* ¶ 397. When BellSouth's maintenance and repair representatives take trouble reports from end-user customers or check the status of a report, they log directly into TAFI.[73]

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[72] Moreover, BellSouth is not required to provide a machine-to-machine integratable interface for maintenance and repair functions provided it demonstrates that it provides equivalent access to its maintenance and repair functions in another manner. *See New York Order* ¶ 215; *Texas Order* ¶ 203 n.565. *See also Stacy Aff.* ¶ 389.

[73] Specifically, the Commission stated that: "BellSouth . . . is able to take advantage of its own TAFI system's capability of 'automatically interacting with other internal systems as appropriate' and its customer service representatives need not duplicate their efforts in the same way." *Second Louisiana Order* ¶ 151 (quoting Affidavit of William N. Stacy ¶ 161, attached to Brief in Support of Second Application by BellSouth for Provision of In-Region, InterLATA Services in Louisiana, CC Docket No. 97-231 (filed July 9, 1998)). But BellSouth's statement that TAFI can "automatically interact[] with other internal systems" did not mean that BellSouth, but not CLECs, could integrate TAFI with their internal systems. *See Stacy Aff.* ¶ 397. TAFI is a human-to-machine GUI – it does not contain line record or trouble history information, but merely provides access to such information on a nondiscriminatory basis. *See id.* ¶¶ 393, 397. Moreover, the interaction between TAFI and BellSouth's other systems would be equally available to CLECs using TAFI. *See id.* ¶ 392. For example, if a customer were to report that the customer's call forwarding feature was not working, the TAFI system would check the customer's records to see if the line should be equipped with the feature and would electronically verify whether the feature had been programmed in the switch serving that customer's line. But TAFI would be able to perform this check regardless of whether the trouble was reported by a

See Stacy Aff. ¶ 397. In fact, the version of TAFI for CLECs is actually superior in that it combines the complete functionality of the separate business and residential versions that BellSouth's retail repair personnel use. *See id.* ¶ 394. BellSouth also offers CLECs access to ECTA, a machine-to-machine integratable interface that allows CLECs to open, modify, and close trouble reports, as well as obtain status information on open trouble reports. *See id.* ¶ 412. KPMG found that BellSouth satisfied all of the test criteria for functional testing and capacity management evaluation of both TAFI and ECTA. *See* MTP Final Report at VII-A-9 to -20; VII-B-7 to -9; *id.* VII-E-7 to -16; *id.* VII-F-6 to -13; STP Final Report at VI-B-8 to -19; *id.* VI-C-7 to -12; *Stacy Aff.* ¶ 411.

Competing carriers are using these maintenance and repair interfaces in commercially significant volumes. In 2000, 31 CLECs used TAFI to enter 251,900 trouble reports region-wide. *See Stacy Aff.* ¶ 50. And through July 2001, 33 CLECs have used TAFI to make 158,612 maintenance and repair entries region-wide. *See id.* ¶ 50. Three CLECs have established ECTA interfaces, with one actively using ECTA. *See id.* ¶ 51.

Moreover, for manually submitted trouble reports, region-wide, between May and July 2001, BellSouth answered CLEC calls to the maintenance center in significantly less time than it answered BellSouth retail calls. For example, in July 2001, the maintenance center answered CLEC calls in only 27.37 seconds, compared to the retail analog of 144.73 seconds. *See Varner Ga. Aff.* ¶ 177; *Varner La. Aff.* ¶ 191.

When a CLEC's customer experiences a problem with its service, BellSouth responds and repairs the problem in the same time that it takes to repair problems for its own retail

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CLEC or BellSouth. And TAFI's data auto-population capabilities are available equally to both CLECs and BellSouth.

customers. In both Georgia and Louisiana, the maintenance average duration for dispatch and non-dispatch repair appointments met or exceeded the retail analog for loop and port combinations in every sub-metric for May, June, and July 2001. *See Varner Ga. Aff.* ¶ 142; *Varner La. Aff.* ¶ 156 (B.3.3.3). In Louisiana, for the dispatched repair appointments completed in July 2001, BellSouth averaged 15.56 hours for the CLECs and 28.38 hours for the retail analog. The non-dispatched repairs averaged much less at 4.90 hours for the CLECs and 11.88 hours for the retail analog. *See Varner La. Aff.* ¶ 156. The results in Georgia were similar. For the dispatched repair appointments completed in July 2001, BellSouth averaged 13.56 hours for the CLECs and 26.88 hours for the retail analog. And for non-dispatched repairs, the average was 4.99 hours for the CLECs and 10.07 hours for the retail analog. *See Varner Ga. Aff.* ¶ 142.

Moreover, in Georgia between May and July, BellSouth met or exceeded the retail analog for Missed Repair Appointments in every sub-metric for loop and port combinations. *See Varner Ga. Aff.* ¶ 140 (B.3.1.3). Overall, during July 2001 for the dispatch sub-metrics, BellSouth only missed 6.57% of CLEC repair appointments compared with the retail analog of 10.12%. *See id.* For non-dispatch repair appointments, BellSouth only missed 3.78% of CLEC appointments, while the retail analog was 3.98%. *See id.* In Louisiana, BellSouth met or exceeded the retail analogue for five of the six sub-metrics for loop and port combinations in this measure for May, June, and July 2001. *See Varner La. Aff.* ¶ 154. In July 2001, for the dispatch sub-metric, BellSouth missed 6.81% of the CLEC scheduled appointments compared with the retail analog of 8.75%. *See id.* For the non-dispatched appointments in July, BellSouth missed no CLEC appointments compared to the retail analog of 3.04%. *See id.*

Overall, BellSouth's performance with respect to the percent of customer troubles reported has also been solid. In both Louisiana and Georgia, BellSouth met the parity

benchmark for loop and port combinations in May, June, and July 2001. *See Varner Ga. Aff.* ¶ 141; *Varner La. Aff.* ¶ 155 (B.3.2.3).

Finally, when BellSouth does fix a trouble, in virtually every case, there are fewer repeat troubles on CLEC end-user lines than on BellSouth end-user lines. In both Georgia and Louisiana, BellSouth met or exceeded the retail analog for Percent Repeat Troubles within 30 days for every sub-metric with substantial CLEC activity. *See Varner Ga. Aff.* ¶ 143; *Varner La. Aff.* ¶ 157 (B.3.4.3). KPMG found that BellSouth had satisfied all of the evaluation criteria related to maintenance and repair functions. *See* MTP Final Report, at III-D-1 to -16; *id.* VII.

iv. Manual Interfaces

To process manual and partially mechanized LSRs, BellSouth has six main CLEC Centers. *See Ainsworth Aff.* ¶ 4. The LCSCs handle the pre-ordering and ordering portions of LSRs for resale, UNEs, and complex services. *See id.* ¶ 5. The Data Customer Support Center ("DCSC") handles various ordering, provisioning and maintenance functions for most broadband services, while the Customer Wholesale Interconnection Network Service ("CWINS") Center handles provisioning for coordinated resale and UNE products and maintenance for all resale and UNE products. *See id.* ¶¶ 5, 17. Some centers, such as the Complex Resale Support Group ("CRSG"), the Intelligent Network Services Center ("INSC"), the Local Interconnection Service Center ("LISC") and the DCSC, interface with a variety of centers to provide a particular type of service. *See id.* ¶¶ 20-22. As explained above, each of these centers utilizes the same methods and procedures, accesses the same databases, and their personnel receive the same training in support of CLECs operating in both Georgia and Louisiana, as well as across all nine states in BellSouth's region. *See id.* ¶¶ 5, 8.

BellSouth's LCSCs are operating at commercial volumes and are capable of handling increased volumes if necessary. There are currently more than 1,000 employees in BellSouth's

LCSCs, which, through July 2001, processed an average of 113,107 manual and electronic fallout LSRs per month.[74] *See Ainsworth Aff.* ¶ 12; *Stacy Aff.* ¶ 457. Moreover, the performance of BellSouth's LCSCs has been excellent. Between May and July 2001, BellSouth LCSCs answered CLEC calls in significantly less time than the retail analog for BellSouth. *See Varner Ga. Aff.* ¶ 177; *Varner La. Aff.* ¶ 164. For example, in July 2001, the LCSC answered CLEC calls for orders from across BellSouth's region in an average of 59.15 seconds, while the retail analog average was 199.33 seconds. *See Varner Ga. Aff.* ¶ 176; *Varner La. Aff.* ¶ 190 (F.4.1). And BellSouth's maintenance centers answered CLEC calls in an average of only 27.37 seconds, compared to the retail analog of 144.73 seconds. *See Varner Ga. Aff.* ¶ 177; *Varner La. Aff.* ¶ 191 (F.5.1).

v. Billing

For those services for which BellSouth bills its retail and interexchange carrier customers, BellSouth uses the same systems to generate billing information for competing carriers that it uses for its own retail operations. *See Scollard Aff.* ¶ 10. BellSouth provides CLECs with usage data via three means – the Optional Daily Usage File ("ODUF"); the Access Daily Usage File ("ADUF"); and the Enhanced Optional Daily Usage File ("EODUF"). *See id.* ¶¶ 33-34; *Stacy Aff.* ¶¶ 52, 424-440. ODUF has been available since March 1996, EODUF since December 31, 1998, and ADUF since December 31, 1997. *See Stacy Aff.* ¶ 52. These daily usage files were designed to provide CLECs with usage records for billable call events that are recorded by BellSouth's central offices. *See Scollard Aff.* ¶ 32. These interfaces allow a CLEC

[74] To ensure adequate staffing at each of these centers, BellSouth utilizes forecast models to anticipate staffing needs. *See Ainsworth Aff.* ¶ 6. Moreover, BellSouth can handle short-term spikes in workload by shifting work between centers or utilizing overtime. *See id.* ¶¶ 6, 12.

to process call records in its billing systems in substantially the same time and manner that BellSouth processes these types of records in its own systems.

There is a high level of commercial usage of BellSouth's billing processes by CLECs. Across its nine-state region, BellSouth produces approximately 5,900 bills each month for hundreds of different CLECs using the various billing options available to them, with 247 CLECs using ODUF, three CLECs using EODUF, and 71 CLECs using ADUF. *See id.* ¶¶ 31, 35; *Stacy Aff.* ¶¶ 52, 424. Specifically in Georgia, BellSouth produces 1,042 bills each month for approximately 152 CLECs operating in the state. *See Scollard Aff.* ¶ 31. And in Louisiana, BellSouth produces 459 bills each month for approximately 65 CLECs operating in the state. *See id.*

BellSouth's performance data demonstrate its ability to provide billing functionality to competing carriers in substantially the same time and manner as BellSouth provides such information to itself, and gives competing carriers a meaningful opportunity to compete. *See Massachusetts Order* ¶ 70 (Commission looks at timeliness of DUFs and carrier bills, and bill accuracy).

For example, region-wide in May, June, and July 2001, BellSouth's invoice accuracy for CLECs exceeded that for BellSouth's retail units. *See Varner Affs.* Exhs. PM-2 to PM-4; PM-14 to PM-16 (B.4.1). And BellSouth provided invoices faster to CLECs than to BellSouth retail units in each of those three months. *See Varner Affs.* Exh. PM-2 to PM-4; PM-14 to PM-16 (B.4.2). BellSouth also provided CLECs with accurate usage data – meeting the applicable parity benchmark for these sub-metrics in both Georgia and Louisiana between June and July, and only barely missing the benchmark in May by 0.01%. *See Varner Ga. Aff.* ¶ 155; *Varner La. Aff.* ¶ 169 (F.9.1). Moreover, BellSouth provides complete usage data, meeting the parity

benchmark region-wide for May, June, and July 2001. *See Varner Ga. Aff.* ¶ 157; *Varner La. Aff.* ¶ 171 (F.9.3). Finally, BellSouth provides CLECs region-wide with usage data in a timely fashion. In both May and June, BellSouth's performance was at parity, and the measurement for July missed the benchmark only as a result of a one-time operational problem, which has since been addressed. *See Varner Ga. Aff.* ¶ 156; *Varner La. Aff.* ¶ 170 (F.9.2). Even in July, BellSouth delivered 96.6% of usage data within six days, thus still providing CLECs a meaningful opportunity to compete. *See Varner Ga. Aff.* ¶ 156. In addition, BellSouth on average provided usage data faster to CLECs than to BellSouth's retail units in each of those three months. *See Varner Ga. Aff.* ¶ 158; *Varner La. Aff.* ¶ 172 (F.9.4).[75]

Finally, KPMG tested BellSouth's usage files in the Georgia third-party test and found all of the ODUF and ADUF test criteria satisfied. *See* MTP Final Report at VI-B-14 to -20.

d. Support for CLECs

To demonstrate compliance with Checklist Item 2, the Commission has held that a BOC must demonstrate that it provides the documentation and support necessary to afford competing carriers nondiscriminatory access to its OSS. *Texas Order* ¶¶ 105, 144; *New York Order* ¶¶ 88, 127. BellSouth provides CLECs with a variety of means by which they can learn about BellSouth's systems and processes, including written guides and manuals, training classes, web-based training, and help desks. *See Stacy Aff.* ¶¶ 54-95. BellSouth's business rules for placing

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[75] CLECs have raised issues of "double billing" in state 271 proceedings. Although BellSouth does not dispute that double billing may occur, the problem may be caused by either the CLEC or BellSouth. *See Scollard Aff.* ¶ 23. For example, consider an end user being provided ten business lines by BellSouth that decides to switch five of those lines to a CLEC provider. A double billing situation could occur if either the CLEC has begun to bill the end user too soon for the five lines or BellSouth continues to bill the end user too long. *See id.* In any event, as explained in the affidavit of David Scollard, BellSouth employs a number of safeguards to minimize the risk of double billing. *See id.* ¶ 24.

electronic and manual LSRs are contained in the *BellSouth Business Rules for Local Ordering* or the *Local Exchange Ordering Implementation Guide*, depending on which software release the CLEC is using. *See id.* ¶¶ 59-61. BellSouth also has included the Universal Service Order Codes ("USOCs") and Field Identifiers ("FIDs") in the USOC Manual, which is available in several formats on BellSouth's interconnection website, including a format that allows CLECs to download and import the manual into commonly used database programs. *See id.* ¶¶ 61-62.

BellSouth offers a variety of training classes for CLECs; in fact, since 1998 BellSouth has conducted more than 435 training classes. *See id.* ¶ 77. For the year 2000, BellSouth offered more than 100 training classes covering a range of topics with more than 1,100 individuals in attendance representing 152 CLECs. *See id.* ¶¶ 77-87. And, in only the first two quarters of 2001, BellSouth offered 65 training classes, with 749 individuals in attendance representing 63 CLECs. *See id.* ¶ 77. Attendees were also asked to review the training classes for effectiveness and efficiency. *See id.* ¶ 88. In 2000, the average CLEC rating of BellSouth's training classes was a 4.6 out of a possible 5. *See id.* Through the second quarter of 2001, this rating had risen to 4.86. *See id.* Clearly, CLECs are satisfied with the training offered by BellSouth.

As with the other requirements of Checklist Item 2, the best proof of the effectiveness of BellSouth's training and documentation can be found in the number of CLECs using the electronic OSS. As discussed above, the significant number of CLECs using EDI and TAG, combined with the high commercial usage of the interfaces, undeniably demonstrates the adequacy of BellSouth's documentation. *See Texas Order* ¶ 120 ("As an initial matter, we agree with SWBT and the Texas Commission that the adequacy of SWBT's documentation is demonstrated by the fact that several competing carriers have constructed and are using EDI interfaces in a commercial environment."). *See also Kansas/Oklahoma Order* ¶ 152.

Finally, KPMG tested the content and accuracy of pre-ordering documentation for TAG (*see* MTP Final Report at IV-C-9 to -15), ordering documentation for EDI (*id.* at V-H-12 to -19), and maintenance and repair documentation for TAFI and ECTA (*id.* at VII-H-5 to -22; VII-I-5 to -8), and found all the test criteria satisfied. *See Stacy Aff.* ¶ 54.

e. Change Management Process

A BOC may further demonstrate that it provides the documentation and support necessary to provide CLECs with nondiscriminatory access to its OSS by demonstrating that it has in place an adequate change management process to which it has adhered over time. *Texas Order* ¶ 105. BellSouth's change management process meets the requirements of this checklist item: (1) information relating to the change management process is clearly organized and readily accessible to CLECs; (2) CLECs had substantial input in the design and continued operation of the change management process; (3) the change management plan defines a procedure for the timely resolution of change management disputes; (4) a stable testing environment that mirrors production is available; and (5) the documentation BellSouth makes available for the purpose of building an electronic gateway is readily usable. *See Stacy Aff.* ¶¶ 106-129, 134-139. *See also Connecticut Order* App. D ¶ 43.

Although BellSouth's change management process has continued to evolve since it was first adopted in 1997, CLECs have had substantial input into the process throughout. *See Stacy Aff.* ¶¶ 97-106. The change management process is memorialized and set forth in a single document and is available at BellSouth's change control website. *See id.* ¶¶ 113, 115. The current document was updated by vote of the members of the Change Control Process ("CCP") and issued on September 10, 2001. *See id.* ¶ 111 & Exh. OSS-39.